Service Manual: 96 - LIGHTS, LAMPS, SWITCHES, INTERIOR -- (95B) - MACAN

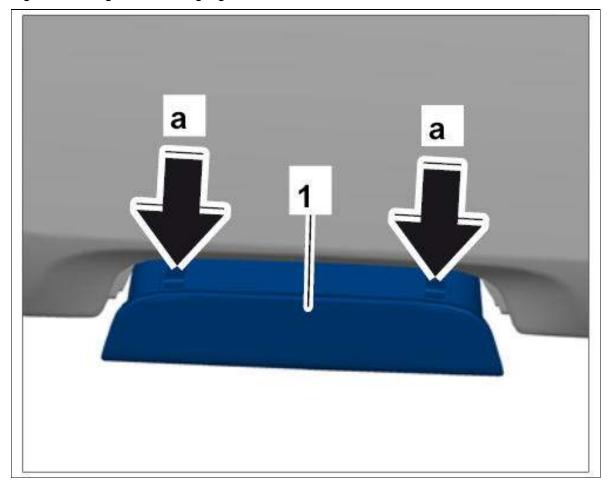
WM 960719 REMOVING AND INSTALLING CONTACT SWITCH FOR GLOVE COMPARTMENT LIGHT (ALL MODELS) > INFORMATION

1. The contact switch for the glove compartment light is integrated in the damper for the glove compartment and cannot be replaced separately.

WM 961619 REMOVING AND INSTALLING DOOR WARNING LIGHT (ALL MODELS) > REMOVING DOOR WARNING LIGHT

1. Release door warning light **-1-** using a small screwdriver **-a-** and pull it out of the door panel horizontally.

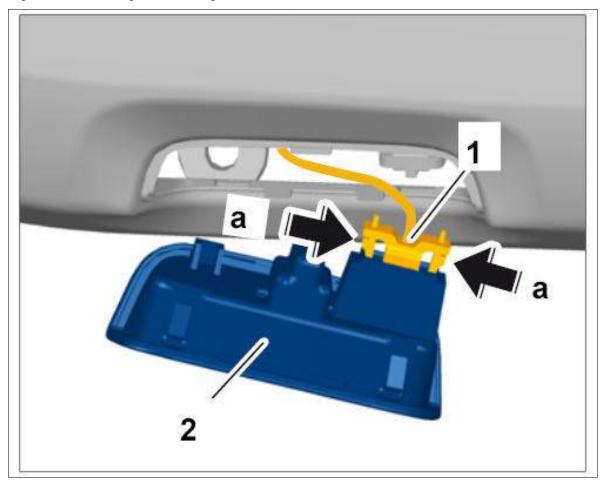




Courtesy of PORSCHE CARS NORTH AMERICA, INC.

2. Release electric plug connection -1- (-a-) and pull it off the door warning light -2- .

Fig 2: Disconnecting Electric Plug Connection



WM 961619 REMOVING AND INSTALLING DOOR WARNING LIGHT (ALL MODELS) > INSTALLING DOOR WARNING LIGHT

1. Installation is performed in reverse order to removal.

WM 962255 REPLACING LIGHT BULB FOR INTERIOR LIGHT (ALL MODELS) > PRELIMINARY WORK

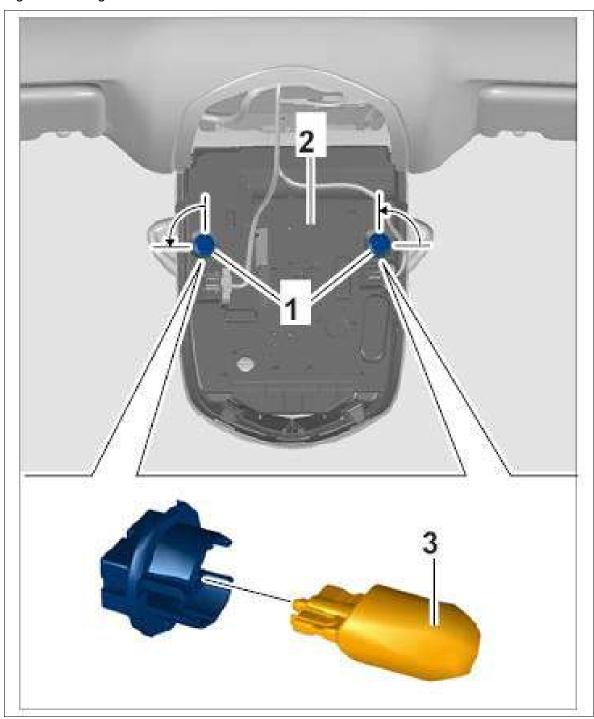
 Loosen front roof trim panel and swivel it downwards with the supply lines connected. → Removing front roof trim panel

WM 962255 REPLACING LIGHT BULB FOR INTERIOR LIGHT (ALL MODELS) > REMOVING LIGHT BULB FOR INTERIOR LIGHT

1. Turn socket -1- 90° in direction of arrow and pull out front roof trim panel -2- .

2. Remove bulb -3- from its socket.

Fig 1: Removing Bulb



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WM 962255 REPLACING LIGHT BULB FOR INTERIOR LIGHT (ALL MODELS) > INSTALLING LIGHT BULB FOR INTERIOR LIGHT

1. Installation is performed in reverse order to removal.

WM 962255 REPLACING LIGHT BULB FOR INTERIOR LIGHT (ALL MODELS) > SUBSEQUENT WORK

1. Install front roof trim panel. → Installing front roof trim panel

WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > TOOLS

Designation	Type	Number	Description	
PIWIS Tester II	Special tool	9818		9818 000 721 981 80

WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > TECHNICAL VALUES

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2
Switch console to center console	Internal Torx screw, M5 x 20	Tightening torque	4 Nm (3 ftlb.)		

WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > PRELIMINARY WORK

 Remove upper part of center console cover. → Removing Upper Part Of Center Console Cover

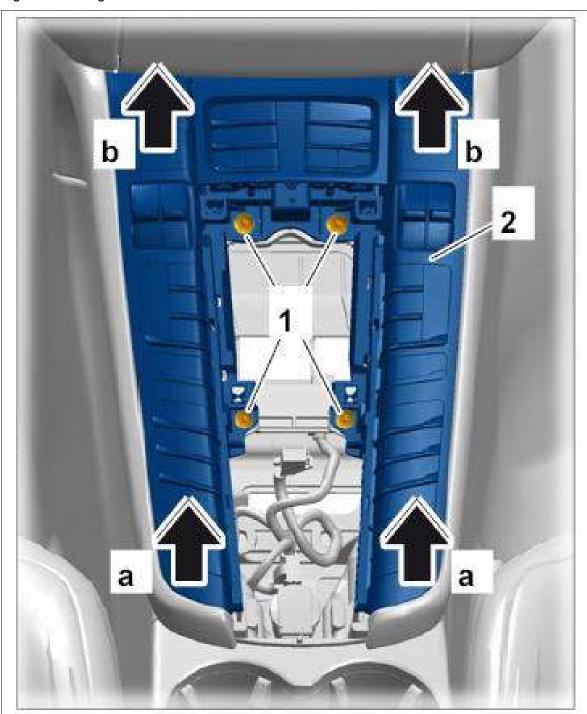
WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > REMOVING SWITCH CONSOLE



NOTE: Voltage peaks

- Risk of damage to load or to the control unit
- → Remove the ignition key and switch off load before disconnecting or removing load.
 - 1. Unscrew fastening screws -1- .
 - 2. Carefully disengage switch console -2- from the center console in an upward direction -a, band pull it out under the flap on the DVD autochanger.

Fig 1: Loosening Switch Console



Information

Always comply with the regulations for handling ESD-sensitive components!

- 1. Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- 2. The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.

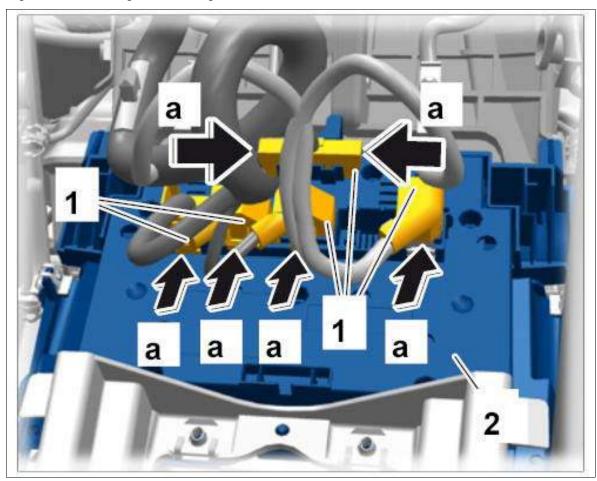
3. Never touch the electric pins and plug contacts.

Information

The number of plug connections can vary, depending on equipment.

3. Release electric plug connections -1- (-a-) and disconnect them from the switch console -2-

Fig 2: Disconnecting Electric Plug Connections



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > INSTALLING SWITCH CONSOLE

Information

Always comply with the regulations for handling ESD-sensitive components!

- Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.

- Never touch the electric pins and plug contacts.
 - 1. Installation is performed in reverse order to removal.
 - 2. Tighten fastening screws securing switch console to center console. **Tightening torque 4 Nm** (3 ftlb.)

WM 962719 REMOVING AND INSTALLING SWITCH CONSOLE (ALL MODELS) > SUBSEQUENT WORK

- 1. Install upper part of center console cover. → Installing Upper Part Of Center Console Cover
- 2. If the switch console was replaced, teach the new switch console to suit the vehicle using **PIWIS Tester II 9818.** \rightarrow 962755 REPLACING SWITCH CONSOLE

WM 962755 REPLACING SWITCH CONSOLE (ALL MODELS) > TOOLS

Designation	Туре	Number	Description	
PIWIS Tester II	Special tool	9818		9818 000 721 981 80

WM 962755 REPLACING SWITCH CONSOLE (ALL MODELS) > TECHNICAL VALUES

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2
Current rating		Nominal value	40 A		

WM 962755 REPLACING SWITCH CONSOLE (ALL MODELS) > PRELIMINARY WORK

1. Replace control unit for switch console. \rightarrow 962719 REMOVING AND INSTALLING SWITCH CONSOLE

CONSOLE



NOTE: Voltage drop

- Risk of irreparable damage to control unit
- Risk of damage to control unit
- · Fault entries in the control unit
- Coding in the control unit is aborted
- Malfunctions in control unit, even during programming
- → Prior to disconnecting the control unit, switch off ignition and remove ignition key.
- → Ensure that the power supply is not interrupted during programming.
- \rightarrow Connect a battery charger with a current rating of at least \rightarrow **Nominal value: 40 A** to the vehicle battery.

Information

The **PIWIS Tester II 9818** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms. Different text or additional information may appear in **PIWIS Tester II 9818** .

- Connect the PIWIS Tester to the vehicle and start the diagnostic application. Switch on ignition.
- 2. Select vehicle type.
- 3. Select the **Air conditioning** control unit in the **overview** .
- 4. Codings/adaptations must now be selected.
- 5. Automatic coding must then be selected and press [F12] to start coding.
- 6. The Tester displays the message Coding completed successfully.
- 7. Select the **Drive links/checks** menu.
- 8. Select **General** group and press [F12].

Information

- 1. The Compressor run-in function can only be carried out when the engine is running.
- 2. Prerequisites for compressor run-in can be displayed in the Porsche System Tester by pressing the [F1] Help button for the air-conditioning system control unit.
- Specifications in the Porsche System Tester have priority and take precedence over the specifications in the description.

- 4. If the Compressor run-in function cannot be activated, then the Reset compressor run-in function must be carried out first.
- 5. Then start the Compressor run-in function again.
- 9. Start the engine.
- 10. Select the **Reset compressor run-in** function by pressing [F12] and then press [F8] to start the reset process.
 - 1. 10.1. A compressor run-in remaining time of 150 s must be set.
- 11. Select the **Compressor run-in** function, press [F12] and then [F8] to start.
- 12. Read out the fault memory and erase it if necessary.
- 13. Check the function of the switch console during a test drive and read out the fault memory.

WM 963819 REMOVING AND INSTALLING FRONT CAMERA (ALL MODELS) > PRELIMINARY WORK

1. Remove trim panels over interior rear-view mirror. → Removing Interior Rear-View Mirror

WM 963819 REMOVING AND INSTALLING FRONT CAMERA (ALL MODELS) > REMOVING FRONT CAMERA



NOTE: Voltage peaks

- · Risk of damage to load or to the control unit
- → Remove the ignition key and switch off load before disconnecting or removing load.

Information

Always comply with the regulations for handling ESD-sensitive components!

- Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.
- Never touch the electric pins and plug contacts.

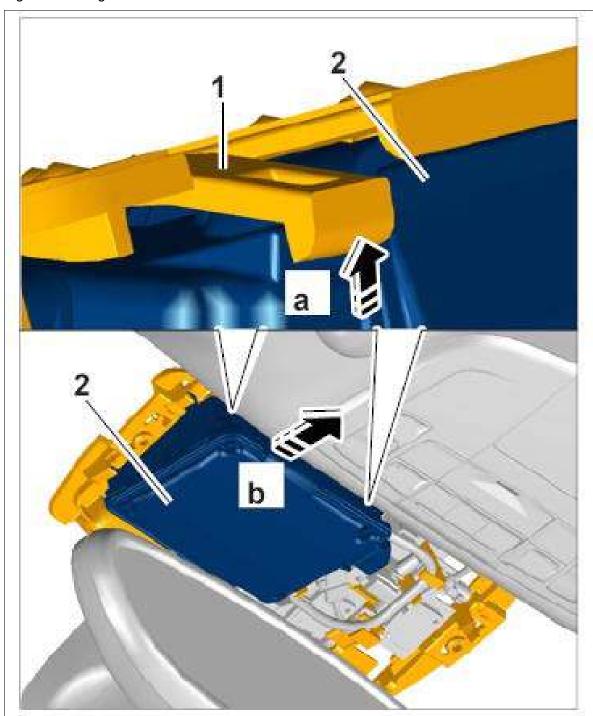
Information

Do not touch the front camera lens!

1. Switch off ignition and pull remote control out of ignition lock.

2. Carefully disengage locks -1- at the left and right using two plastic wedges -a- and press front camera -2- to the rear and out of the holder -b- .

Fig 1: Removing Front Camera



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

3. Release electric plug connection -1- (-a-) and pull it off the front camera -2- .

Fig 2: Disconnecting Electric Plug Connection

WM 963819 REMOVING AND INSTALLING FRONT CAMERA (ALL MODELS) > INSTALLING FRONT CAMERA

Information

Always comply with the regulations for handling ESD-sensitive components!

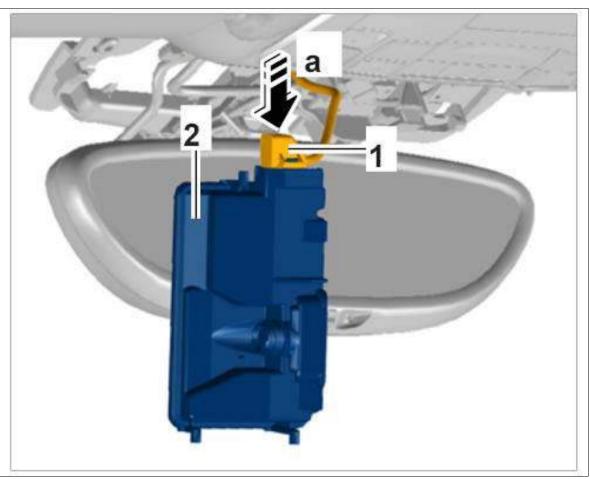
- Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.
- Never touch the electric pins and plug contacts.

Information

Do not touch the front camera lens!

1. Connect electric plug connection -1- on the front camera -2- (-a-) until it engages securely.

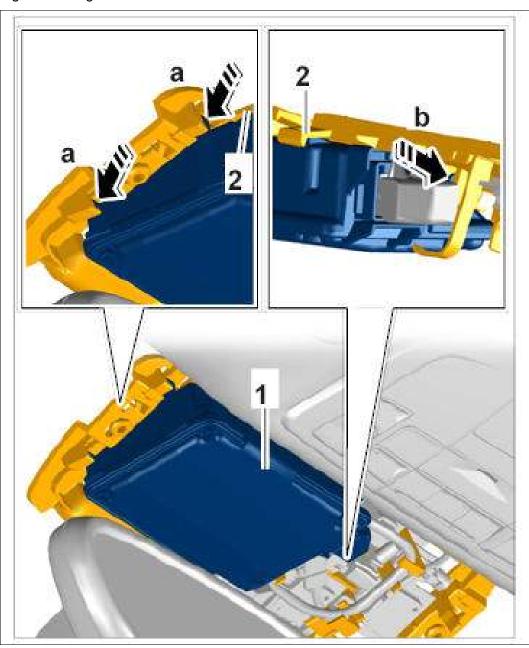
Fig 1: Connecting Electric Plug Connection



2. Install front camera.

- 1. 2.1. Position front camera -1- on the holder in such a way that the two retaining pins at the left -a- and the retaining pin at the right -b- make contact with the mounting points.
- 2. 2.2. Press front camera forward into the mounting points until the locks **-2-** engage securely.

Fig 2: Installing Front Camera



WM 963819 REMOVING AND INSTALLING FRONT CAMERA (ALL MODELS) > SUBSEQUENT WORK

- 1. Install trim panels over interior rear-view mirror. → Installing Interior Rear-View Mirror
- 2. If the front camera was replaced or the windscreen was removed and installed, calibrate the front camera. \rightarrow 9638K2 CALIBRATING FRONT CAMERA

WM 9638K2 CALIBRATING FRONT CAMERA (ALL MODELS) > TOOLS

Designation	Туре	Number	Description	
Setting device with reflector	Service equipment	WE 1362		
Calibration board for lane departure warning	Service equipment	WE 1540		
PIWIS Tester II	Special tool	9818		9818 000 721 981 80

WM 9638K2 CALIBRATING FRONT CAMERA (ALL MODELS) > TECHNICAL VALUES

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2
Current rating		Nominal value	40 A		

WM 9638K2 CALIBRATING FRONT CAMERA (ALL MODELS) > INFORMATION

When does the front camera need to be calibrated?

The front camera must be re-calibrated in the following situations:

- · When removing and installing the front camera
- When removing and installing the windscreen
- When changing the height of the chassis
- When adjusting the chassis

WM 9638K2 CALIBRATING FRONT CAMERA (ALL MODELS) > PRELIMINARY WORK

Information

The exact position of the front camera with respect to the vehicle coordinate system is determined by calibrating the front camera.

 The setting device Setting device with reflector WE 1362, the calibration board Calibration board for lane departure warning WE 1540 and a wheel alignment computer are required for the calibration process.

Information

Calibration must only be performed on a levelled wheel alignment platform or on level ground.

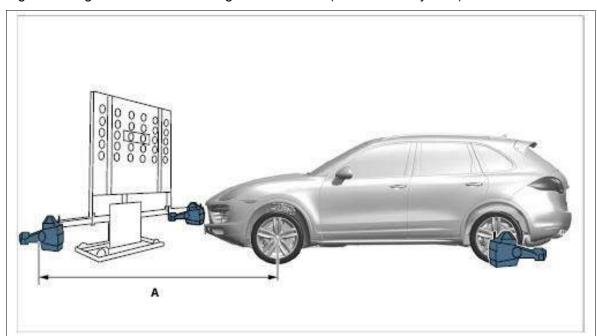
On vehicles with air suspension, switch on ignition, close the doors and set the air suspension to **Normal** .

Information

The vehicle must be empty and all doors must be closed.

- 1. If work was carried out on the chassis, basic initial alignment must be carried out before calibrating the front camera. → 449503 SUSPENSION ALIGNMENT, COMPLETE
- 2. The level must be set to Normal for vehicles with air suspension .

Fig 1: Parking Vehicle On Wheel Alignment Platform (Shown On Cayenne)



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

Park the vehicle on a levelled wheel alignment platform or on a level surface and set up the calibration unit **Setting device with reflector WE 1362** in front of the vehicle in accordance with the instructions on the wheel alignment computer and PIWIS Tester.

WM 9638K2 CALIBRATING FRONT CAMERA (ALL MODELS) > CALIBRATING FRONT CAMERA



NOTE: Voltage drop

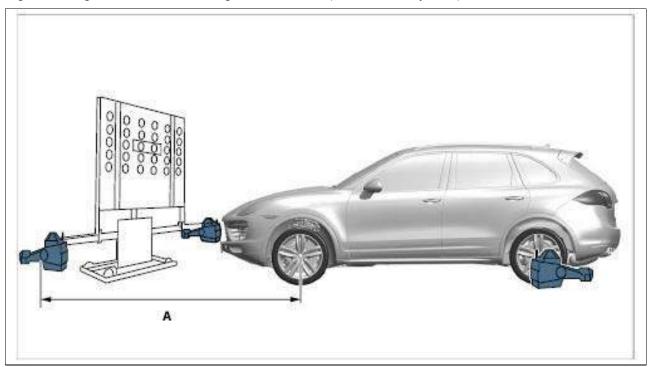
- · Risk of irreparable damage to control unit
- Risk of damage to control unit
- Fault entries in the control unit
- · Coding in the control unit is aborted
- Malfunctions in control unit, even during programming
- → Prior to disconnecting the control unit, switch off ignition and remove ignition key.
- → Ensure that the power supply is not interrupted during programming.
- → Connect a battery charger with a current rating of at least → **Nominal value: 40 A** to the vehicle battery.

Information

The PIWIS Tester II 9818 instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms. Different text or additional information may appear in PIWIS Tester II 9818 .

Fig 1: Parking Vehicle On Wheel Alignment Platform (Shown On Cayenne)



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

1. The following tools are required:

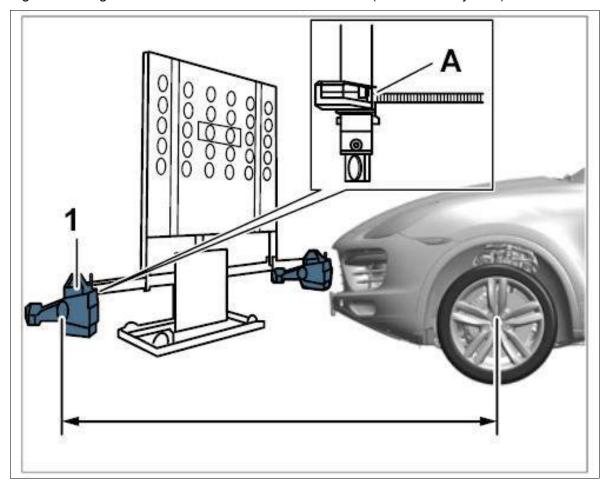
- 1. 1.1. Setting device Setting device with reflector WE 1362
- 2. 1.2. Calibration board Lane departure warning calibration board WE 1540
- 3. 1.3. Wheel alignment computer
- 2. Select the relevant vehicle in the wheel alignment computer.
- 3. Select quick function Calibrate front camera.
- 4. Align the calibration board. Follow the steps and instructions on the wheel alignment computer.
- 5. The surface of the board must be clean and free of objects.

Information

The required height of the calibration board and the distance of the calibration board from the vehicle will not be displayed on the wheel alignment computer. These values are stored under **Front camera calibration** in the Tester.

6. Set the distance from the calibration unit to the vehicle as shown on the Tester. The distance -A- must always be between 1, 000 mm and 3, 000 mm from the center of the wheel hub to the calibration unit. The difference between the right and left side must be < 5 mm.</p>

Fig 2: Checking Distance From Vehicle To Calibration Unit (Shown On Cayenne)



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

7. Secure measured-value pickup mounting to the rear wheels of the vehicle.

- Fit the relevant measured-value pickups on the measured-value pickup mounting and the calibration board.
- 9. The height of the calibration board must be **1,400 mm**. Make sure that the measuring stick is touching the floor. If the vehicle is on a wheel alignment platform, the height of the calibration board must be adjusted to include the height of the wheel alignment platform.
- 10. Before starting the calibration process, write down the height of the four wheel housing edges. These must be measured from the floor (vehicle standing level) to the highest point of each wheel housing edge and must be specified in mm.
- 11. The wheel alignment computer is no longer needed for the rest of the calibration process. ↓ **Do** not move the vehicle or calibration board from this point onwards!

Information

Once all adjustment procedures are complete in the wheel alignment computer, start the calibration process in the PIWIS Tester.

- 12. Connect the PIWIS Tester to the vehicle and start the PIWIS Tester. Switch on ignition and press [F12] to continue.
- 13. Select the vehicle type and start the diagnostic application.
- 14. Select the Front camera control unit in the overview.
- 15. Select Maintenance/repairs.
- 16. Select Calibrate front camera and press [F12]
- 17. Read the warnings displayed on the Tester and follow the instructions.
- 18. Enter the values **Wheel housing edge height and Distance to calibration board.** Press [F12] to continue.
- 19. Start the calibration process by pressing [F8]. The vehicle must not be moved.
- 20. The Tester confirms that calibration was completed successfully.

Information

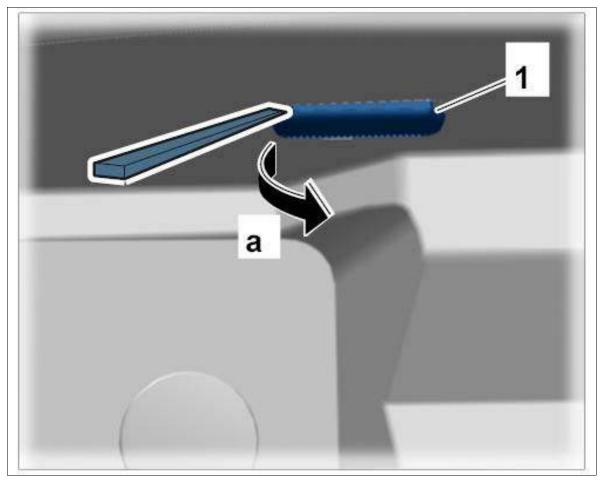
If the calibration process could not be completed successfully, one or more of the calibration values are outside of the required range. There can be a number of different reasons for this.

- 1. The calibration board is not at the correct height.
- 2. The vehicle and calibration board are not aligned correctly.
- 21. Switch ignition off and then on again.
- 22. Check the function of the front camera.
- 23. Read out the fault memory.

MODELS) > REMOVING GLOVE COMPARTMENT LIGHT

- 1. Switch off ignition and pull remote control out of ignition lock.
- 2. Open the glove compartment and unclip glove compartment light **-1-** from the glove compartment using a plastic wedge **-a-** .

Fig 1: Loosening Glove Compartment Light



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

3. Release electric plug connection **-1-** (**-a-**) and disconnect it from the glove compartment light **-2-** .

1

Fig 2: Disconnecting Electric Plug Connection

WM 964419 REMOVING AND INSTALLING GLOVE COMPARTMENT LIGHT (ALL MODELS) > INSTALLING GLOVE COMPARTMENT LIGHT

1. Installation is performed in reverse order to removal.

WM 964619 REMOVING AND INSTALLING READING LIGHT (ALL MODELS) > REMOVING READING LIGHT

1. Release locks **-arrows**- for the reading light **-1**- at the same time using a small screwdriver and lever the reading light out of the headliner.

Fig 1: Removing Reading Light



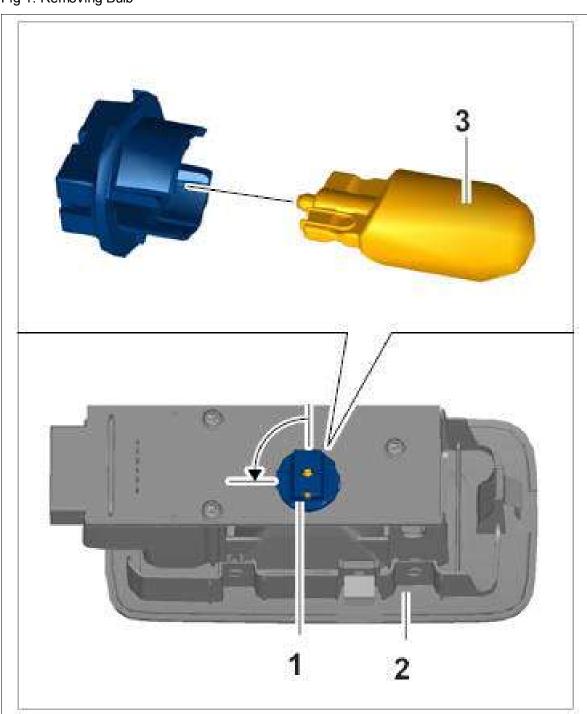
2. Release electric plug connection -1- (-a-) and pull it off the reading light -2- .

Fig 2: Disconnecting Electric Plug Connection

WM 964619 REMOVING AND INSTALLING READING LIGHT (ALL MODELS) > REMOVING BULB

- 1. Turn socket -1- 90° in direction of arrow and pull it out of the reading light -2- .
- 2. Remove bulb -3- from its socket.

Fig 1: Removing Bulb



WM 964619 REMOVING AND INSTALLING READING LIGHT (ALL MODELS) > INSTALLING BULB

1. Installation is performed in reverse order to removal.

WM 964619 REMOVING AND INSTALLING READING LIGHT (ALL MODELS) > INSTALLING READING LIGHT

1. Installation is performed in reverse order to removal.

WM 966255 REPLACING REMOTE CONTROL (HAND-HELD TRANSMITTER) (ALL MODELS) > TOOLS

Designation	Type	Number	Description	
PIWIS Tester II	Special tool	9818		9818 000 721 981 80

WM 966255 REPLACING REMOTE CONTROL (HAND-HELD TRANSMITTER) (ALL MODELS) > TECHNICAL VALUES

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2
Current rating		Nominal value	40 A		

WM 966255 REPLACING REMOTE CONTROL (HAND-HELD TRANSMITTER) (ALL MODELS) > REPLACING REMOTE CONTROL (HAND-HELD TRANSMITTER) > REPLACING REMOTE CONTROL

Information

All remote controls (keys) are required for teaching a DME, front-end electronics (front BCM), rear-end electronics (rear BCM), electronic steering lock (ELV) control unit or remote controls (keys) for example.

Remote controls (keys) that are not taught during this teaching procedure will no longer be recognized by the vehicle.

9

NOTE: Voltage drop

- · Risk of irreparable damage to control unit
- · Risk of damage to control unit
- Fault entries in the control unit
- · Coding in the control unit is aborted
- Malfunctions in control unit, even during programming
- → Prior to disconnecting the control unit, switch off ignition and remove ignition key.
- → Ensure that the power supply is not interrupted during programming.
- \rightarrow Connect a battery charger with a current rating of at least \rightarrow **Nominal value: 40 A** to the vehicle battery.

Information

The **PIWIS Tester II 9818** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms. Different text or additional information may appear in **PIWIS Tester II 9818** .

- 1. Connect the PIWIS Tester to the vehicle and start the PIWIS Tester. Switch on ignition.
- 2. Select the menu **Diagnostics -> Online teaching function -> Engine immobilizer** on the Start page.
- The relevant vehicle must now be selected. Then press [F12] to ↓continue.
- 4. Follow the instructions on the Tester and press [F12] to continue.
- 5. The vehicle identification number (VIN) is displayed. Change the vehicle identification number if necessary.
- 6. Enter the repair order number and press [F12] to continue.
- 7. Enter the PPN user name and password and press [F12] to continue.
- 8. Login is performed.
- 9. The Tester displays the message Login successful . Press [F12] to continue.
- 10. Follow the instructions on the Tester to select the required menu.
- 11. Once the teaching process is completed successfully, the Tester shows the following status, for example:
 - 2 keys taught

Front BCM: taught

ELV: taught

Rear BCM: taught

DME: taught

Overall vehicle status: taught. Press [F12] to continue.

- 12. Press [ESC] to end the Online teaching function and select the vehicle type on the Start page.
- 13. Function test: Lock, open and start the vehicle using all remote controls (hand-held transmitters).
- 14. Read all fault memories and erase if necessary.

WM 966519 REMOVING AND INSTALLING ALARM SIREN (ALL MODELS) > TECHNICAL VALUES

Location	Description	Туре	Basic value	Tolerance 1	Tolerance 2
Alarm siren holder to cowl panel	Collar nut, M6	Tightening torque	7 Nm (5 ftlb.)		

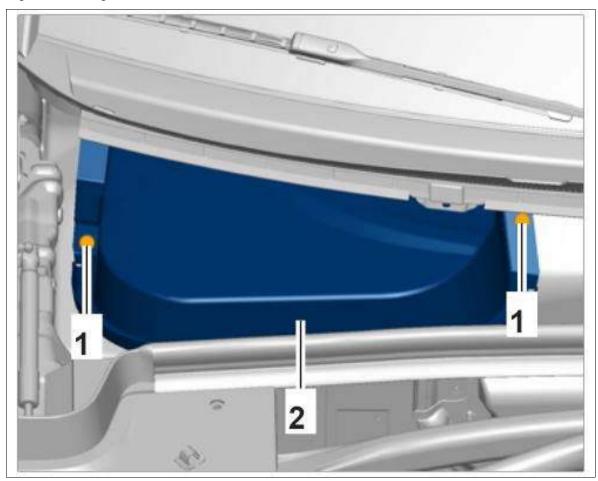
WM 966519 REMOVING AND INSTALLING ALARM SIREN (ALL MODELS) > PRELIMINARY WORK

1. Remove cowl panel cover. \rightarrow Removing cowl panel cover

WM 966519 REMOVING AND INSTALLING ALARM SIREN (ALL MODELS) > REMOVING ALARM SIREN

1. Screw off fastening nuts -1- and remove cover -2- .

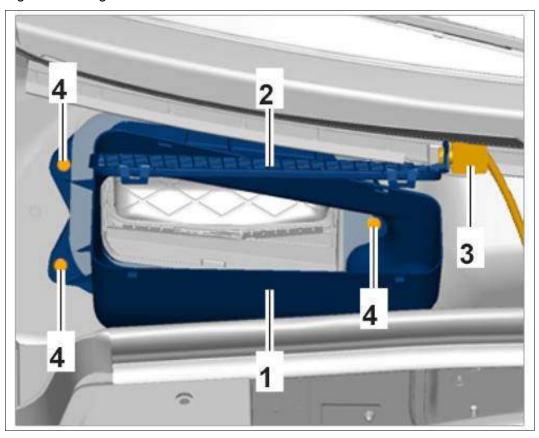
Fig 1: Removing Cover



2. Remove air inlet -1- .

- 1. 2.1. Disengage grille **-2-** in front of the air inlet and pull it to the rear and out of the guides.
- 2. 2.2. Carefully set the grille aside and leave electric plug connection on the air quality sensor **-3** connected.
- 3. 2.3. Screw off fastening nuts -4- and remove air inlet.

Fig 2: Removing Air Inlet



- 3. Remove alarm siren -1- .
 - 1. 3.1. Release electric plug connection **-2-** and pull it off the alarm siren.
 - 2. 3.2. Unscrew fastening nut -3- and remove alarm siren and holder.

Fig 3: Removing Alarm Siren (Alarm Siren Without NI-MH Accumulator Shown)

WM 966519 REMOVING AND INSTALLING ALARM SIREN (ALL MODELS) > INSTALLING ALARM SIREN

- 1. Installation is performed in reverse order to removal.
- 2. Tighten fastening nut on the alarm siren holder. Tightening torque 7 Nm (5 ftlb.)

WM 966519 REMOVING AND INSTALLING ALARM SIREN (ALL MODELS) > SUBSEQUENT WORK

1. Install cowl panel cover. → Installing cowl panel cover

Alarm siren with Ni-MH accumulator

2. Bring defective alarm siren to a collection point. Do not dispose of alarm sirens in domestic rubbish!

PRELIMINARY WORK > PRELIMINARY WORK FOR KESSY ANTENNA ON DASHBOARD

 Remove PCM display and operator control unit. → Removing PCM display and operator control unit

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > PRELIMINARY WORK > PRELIMINARY WORK FOR KESSY ANTENNA ON CENTRE CONSOLE

1. Remove covering frame at the rear center console and set it aside with the lines connected. → Removing Covering Frame For Center Console

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > PRELIMINARY WORK > PRELIMINARY WORK FOR KESSY ANTENNA IN LUGGAGE COMPARTMENT

1. Remove center trim panel for luggage compartment at the rear. → Removing center trim panel for luggage compartment (luggage compartment cover)

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > PRELIMINARY WORK > PRELIMINARY WORK FOR REAR KESSY ANTENNA

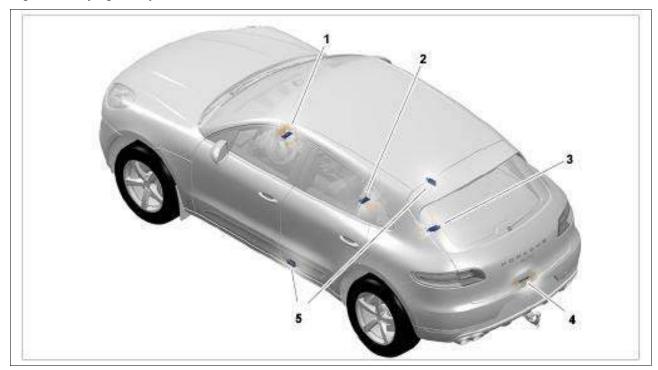
1. Remove rear apron. → REMOVING REAR APRON

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > PRELIMINARY WORK > PRELIMINARY WORK FOR KESSY ANTENNA ON DOOR ENTRY GUARD

1. Remove door entry guard. → Removing door entry guard

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > INFORMATION > INSTALLATION POSITION

Fig 1: Identifying Kessy Antennas Position



- 1. KESSY antenna on dashboard
- 2. KESSY antenna on center console
- 3. KESSY antenna in luggage compartment
- 4. KESSY antenna in rear-end
- 5. KESSY antenna on door entry guard (left and right)

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > REMOVING KESSY ANTENNA > REMOVING KESSY ANTENNA ON DASHBOARD

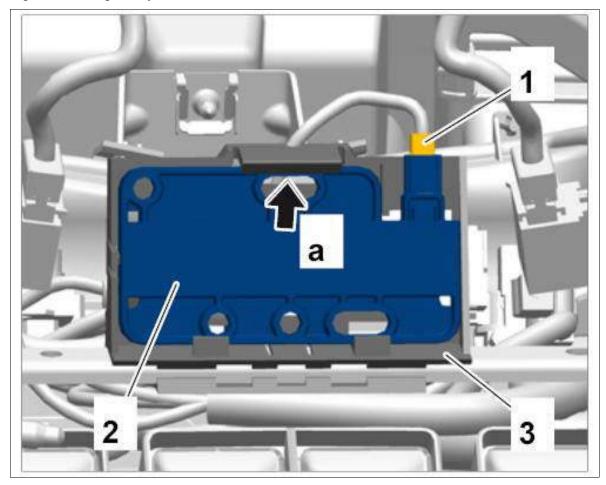
- 1. Unclip holder -1- for line at the holder -2- .
- 2. Disengage clips **-3-** on the holder and pull holder with Kessy antenna on dashboard up off the dashboard strut.

1 2

Fig 1: Removing Kessy Antenna Holder On Dashboard

- 3. Disconnect electric plug connection -1- from Kessy antenna on dashboard -2- .
- 4. Disengage retaining lug -a- and remove KESSY antenna on dashboard from its holder -3- .

Fig 2: Removing Kessy Antenna On Dashboard



Removing KESSY antenna on center console

- 1. Unscrew fastening screws -1- and remove KESSY antenna on center console -2- .
- 2. Disconnect electric plug connection -3- .

Fig 3: Removing Kessy Antenna On Centre Console

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > REMOVING KESSY ANTENNA > REMOVING KESSY ANTENNA IN LUGGAGE COMPARTMENT

- 1. Disengage retaining lugs -a- and remove KESSY antenna in luggage compartment -1- from its holder.
- 2. Release and disconnect electric plug connection -2- (-b-).

b a a

Fig 1: Removing Kessy Antenna In Luggage Compartment

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > REMOVING KESSY ANTENNA > REMOVING REAR KESSY ANTENNA

- 1. Disengage retaining lugs -a- and remove rear KESSY antenna -1- from its holder.
- 2. Release and disconnect electric plug connection -2- (-b-).

Fig 1: Removing Rear Kessy Antenna

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > REMOVING KESSY ANTENNA > REMOVING KESSY ANTENNA ON DOOR ENTRY GUARD

- 1. Unclip electric line from the holder -a- .
- 2. Disengage retaining lug **-b-** and remove KESSY antenna on door entry guard **-1-** from its holder.
- 3. Release and disconnect electric plug connection -2- (-c-).

Fig 1: Removing Kessy Antenna On Door Entry Guard

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > INSTALLING KESSY ANTENNA

1. Installation is performed in reverse order to removal.

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > SUBSEQUENT WORK > SUBSEQUENT WORK FOR KESSY ANTENNA ON DASHBOARD

1. Install PCM display and operator control unit. → Installing PCM display and operator control unit

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > SUBSEQUENT WORK > SUBSEQUENT WORK FOR KESSY ANTENNA ON CENTRE

CONSOLE

1. Install covering frame for rear center console. → Installing Covering Frame For Center Console

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > SUBSEQUENT WORK > SUBSEQUENT WORK FOR KESSY ANTENNA IN LUGGAGE COMPARTMENT

1. Install center trim panel for luggage compartment at the rear. →Installing center trim panel for luggage compartment (luggage compartment cover)

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > SUBSEQUENT WORK > SUBSEQUENT WORK FOR REAR KESSY ANTENNA

1. Install rear apron. → INSTALLING REAR APRON

WM 966719 REMOVING AND INSTALLING KESSY ANTENNA (ALL MODELS) > SUBSEQUENT WORK > SUBSEQUENT WORK FOR KESSY ANTENNA ON DOOR ENTRY GUARD

1. Install door entry guard. → Installing door entry guard

WM 967919 REMOVING AND INSTALLING CONTROL UNIT FOR GARAGE DOOR OPENER (ALL MODELS) > PRELIMINARY WORK

1. Remove front apron. → Removing Front Apron

WM 967919 REMOVING AND INSTALLING CONTROL UNIT FOR GARAGE DOOR OPENER (ALL MODELS) > REMOVING CONTROL UNIT FOR GARAGE DOOR OPENER



NOTE: Voltage peaks

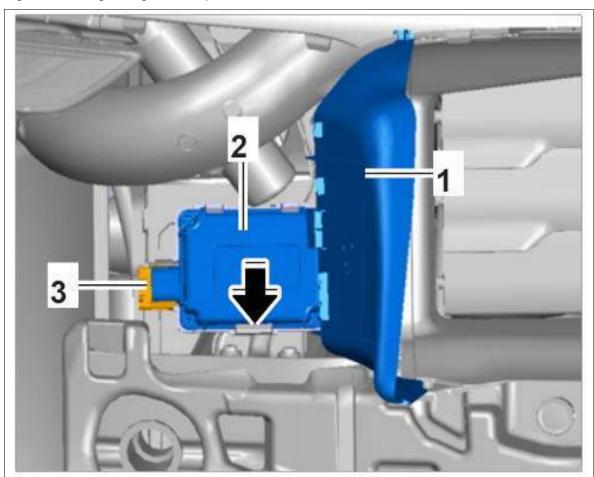
- Risk of damage to load or to the control unit
- → Remove the ignition key and switch off load before disconnecting or removing load.

Information

Always comply with the regulations for handling ESD-sensitive components!

- Assembly work may only be carried out if the mechanic is wearing the working clothes and shoes approved by Porsche.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.
- Never touch the electric pins and plug contacts.
 - 1. Swivel right flap -1- of the air guide forward.
 - 2. Disengage lower locking mechanism **-arrow-** and remove control unit for garage door opener **-2-** from the holder.
 - 3. Release and disconnect electric plug connection -3- .

Fig 1: Removing Garage Door Opener Control Unit



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

WM 967919 REMOVING AND INSTALLING CONTROL UNIT FOR GARAGE DOOR OPENER (ALL MODELS) > INSTALLING CONTROL UNIT FOR GARAGE DOOR OPENER

1. Installation is performed in reverse order to removal.

WM 967919 REMOVING AND INSTALLING CONTROL UNIT FOR GARAGE DOOR OPENER (ALL MODELS) > SUBSEQUENT WORK

- 1. Install front apron. → Installing Front Apron
- 2. If the garage door opener control unit was replaced, all remote controls (e.g. for the garage door, gate to property) must be re-taught to suit the garage door opener control unit. → 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER

WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER > TEACHING CONTROL UNIT FOR GARAGE DOOR OPENER

Information

If the garage door opener control unit was replaced, the remote controls for the garage door drive, for example, must be re-taught.

Information

Original remote controls for garage door system cannot be taught to operate with the HomeLink in the vehicle. OR: The teaching process was confirmed, but HomeLink will not work or only works sporadically.

• Check that the battery in the original remote control for the garage door opener is new. If in doubt, change the battery and repeat the teaching process.

The programmable HomeLink replaces up to three original remote controls for operating various equipment (e.g. garage door, gate to property, alarm system).

The buttons I, II and III can each be programmed with one frequency of an original remote control.

Prerequisites for operating and programming the HomeLink:

- o The ignition is switched on.
- o The hazard warning lights are switched off.

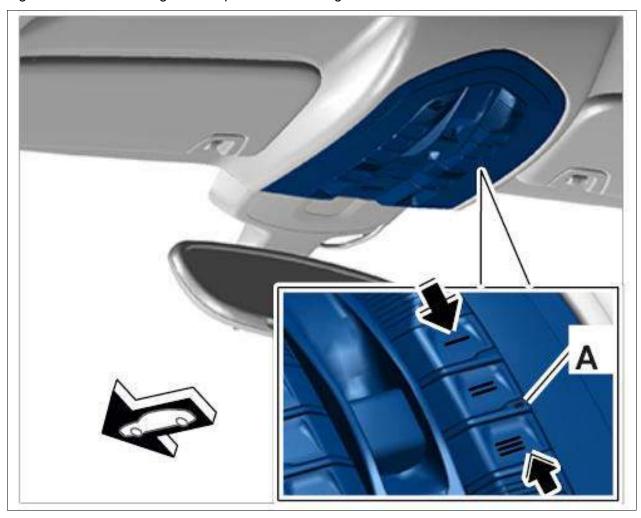
WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER > DELETING STORED SIGNAL FROM THE BUTTONS

Information

This operation erases the standard codes set in the factory. Do not repeat this operation if additional signals are to be stored on the buttons.

• Hold the two outer buttons I and III down for around 20 seconds until the LED -A- starts to flash quickly. All programmed signals for the buttons are erased.

Fig 1: Overview Of Garage Door Opener Button Assignment



Courtesy of PORSCHE CARS NORTH AMERICA, INC.

WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER > STORING GARAGE DOOR OPENER SIGNAL ON BUTTON WITH FIXED CODE SYSTEM

Information

A number of attempts may be necessary at different distances between the vehicle and original remote control.

The hazard warning lights flash once after 5 minutes. The programming operation must then be started from scratch.

- 1. The standard codes set in the factory must be erased first before any signals can be stored.
- 2. Press the required button on the keypad of the roof control unit until the indicator light **-A-** on button **II** flashes slowly. The button is then in learning mode for 5 minutes.

A

Fig 1: Overview Of Garage Door Opener Button Assignment

3. Hold the original remote control at a distance of around 30 cm from the spot marked (picture) and press the Send button until the vehicle's hazard warning lights light up three times (takes up to approx. 45 seconds).

Fig 2: Identifying Remote Control Teaching Position



4. Repeat Steps 2 to 4 to assign further buttons.

WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER > STORING GARAGE DOOR OPENER SIGNAL ON BUTTON WITH VARIABLE CODE SYSTEM

Information

Check operating instructions for the garage door drive (or other system) for specification of a variable code.

If the garage door opener control unit has been programmed to a variable code system, it will still have to be synchronised with this system on completion of programming before it will work correctly.

- 1. The standard codes set in the factory must be erased first before any signals can be stored.
- 2. Press the required button until the LED flashes slowly. You then have around 5 minutes to complete steps 3 and 4.

A

Fig 1: Overview Of Garage Door Opener Button Assignment

3. Hold the original remote control approx. 0 - 30 cm in front of the marked position on the vehicle.

Fig 2: Identifying Remote Control Teaching Position



- 4. Press the Send button on the original remote control until the hazard warning lights flash three times (up to approx. 45 seconds).
- 5. To synchronise the system: Press the programming button on the garage door drive receiver. You then have 30 seconds to initiate Step 6.
- 6. Press assigned button on the HomeLink twice. (You may have to press the button to be assigned a third time on some equipment in order to complete the setting.)
- 7. Repeat the programming steps to assign further buttons.

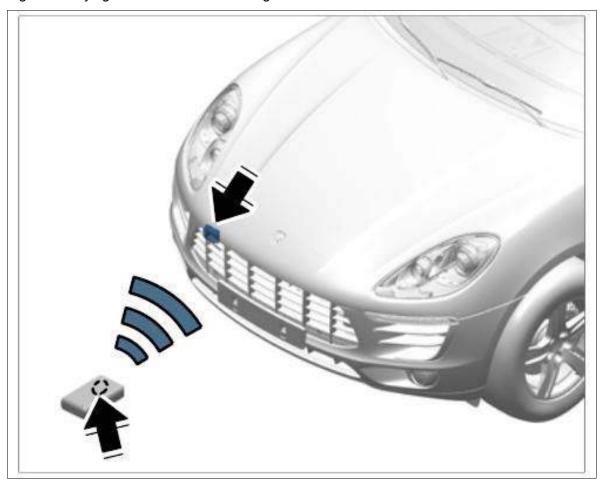
WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER > RE-PROGRAMMING AN INDIVIDUAL BUTTON ON THE KEYPAD

1. Press the required button until the LED flashes slowly (approx. 20 seconds). You then have around 5 minutes to complete Steps 2 and 3.

Fig 1: Overview Of Garage Door Opener Button Assignment

2. Hold the original remote control approx. 0 - 30 cm in front of the marked position on the vehicle.

Fig 2: Identifying Remote Control Teaching Position



- 3. Press the Send button on the original remote control until the hazard warning lights flash three times (up to approx. 45 seconds).
- 4. Repeat Steps 1 to 3 to assign further buttons.

Information

A number of attempts may be necessary at different distances between the vehicle and original remote control.

The hazard warning lights flash once after 5 minutes. The programming operation must then be started from scratch.

WM 967955 REPLACING CONTROL UNIT FOR GARAGE DOOR OPENER(ALL MODELS) > DIAGNOSTICS

Information

Original remote controls for garage door system cannot be taught to operate with the HomeLink in the vehicle. OR: The teaching process was confirmed, but HomeLink will not work or only works sporadically.

 Check that the battery in the original remote control for the garage door opener is new. If in doubt, change the battery and repeat the teaching process.

If after carefully observing the operating instructions and following the procedures described, teaching of the garage door opener control unit is not possible, further information can be obtained from a Hotline facility. A basic requirement is to obtain the diagnostic information beforehand as follows.

Software version

1. Press button I or III (not both) and hold for 50 seconds. The LED stops flashing and goes out completely. Continue to hold the button down. A few seconds later the LED flashes several times. The number of flashes corresponds to the software version.

e.g. four flashes e.g	.g. version 4.0
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Regional code status

2. Press button II on the roof console and hold for approx. 50 seconds until the LED goes out and stays off. Continue to hold down button II. After a few seconds the LED flashes several times. The number of flashes indicates the programmed region.

One flash	Rest of Europe
Two flashes	France
Three flashes	U.K.
Four flashes	Italy

Information

- 3. Provide the following additional information about the vehicle and the original remote control:
 - 1. Dealer, make, model and model year of the vehicle.
 - 2. Make, model, age and operating frequency of the original remote control.

Hotline

Internet: www.homelink.com

For RoW, telephone: (0) 0800 0466 354 65

For USA, telephone: 1-800-355-3515